

REMARKS

In response to the office action mailed August 26, 2008, Applicant offers the following arguments in support of the claims as presently listed. Claims 1-35 are pending and stand rejected. Continued examination and allowance of the claims is respectfully requested.

The Office Action has rejected claims 1-6, 8-10, 15-21 and 23-35 under 35 USC Section 102(b) as being anticipated by Kawanishi (U.S. Patent No. 5,894,111). Kawanishi discloses the dosage of a substance by means of a plurality of substance compartments that are individually emptiable and that comprise a main substance compartment, a plurality of additive substance compartments and a plurality of subtractive substance compartments. The substance compartments are dimensioned such that if they are filled, the substance in the main substance compartment and the subtractive substance compartments together have approximately the target weight. The main substance compartment and the subtractive substance compartments with the stored substance are weighed once by a load cell. If the weight of the main substance compartment and the subtractive substance compartments is subtracted, the gross weight of the substance in the main substance compartment and the subtractive substance compartments is received. This gross weight is compared to the target weight by subtraction.

Depending on the determined difference, it is decided which substance compartments have to be emptied together with the main substance compartment in a target container in order that the substance emptied (dosed) into the target container has the target weight. In doing so it is utilized that the non-emptying of a subtractive substance compartment and the emptying of an additive substance compartment have a contrary effect. The non-emptying of a subtractive substance compartment, the contained substance of which is counted in the weighed gross weight, causes a reduction of the dosed amount of substance compared to the gross weight, whereas the emptying of an additive substance compartment, the contained substance of which is not counted in the weighed gross weight, causes an increase of the dosed amount of substance compared to the gross weight. By suitable combination of the non-emptying of subtractive substance compartments and the emptying of additive substance compartments the target weight can be attained if there are enough suitable subtractive and additive substance compartments.

The weight in an individual subtractive or additive substance compartment is not determined by weighing, but calculated by means of the specific weight of the substance and the volume of the substance compartment. This requires that the specific weight of the substance is known. Otherwise, it must be calculated from the weighed gross weight and the volume of the substance in the main substance compartment and the subtractive substance compartments, which is possible in case that besides the subtractive substance compartments also the main substance compartment has a fixed filling volume. But as a consequence of this, the gross weight is more or less given and it is no more possible to choose it approximately, which would be possible in case that the main substance compartment could be filled only partially.

It is to be noted that in the dosage methods disclosed in Kawanishi the emptying of all determined substance compartments into the target container takes place simultaneously. Afterwards, the dosed substance is no more weighed. There is no approach to the target weight by dosage of a first amount of substance, weighing of the dosed substance, further dosage etc.

Therefore, the load cells of the dosage apparatuses disclosed in Kawanishi do not have to be very exact. They only have to render possible the determination of the gross weight, which corresponds more or less to the target weight. The measuring of the weight of the substance in an individual subtractive or additive substance compartment, which is in general at least one order of magnitude smaller, by measuring of the weight before and after emptying of the concerned substance compartment, is not planned and not even possible for the additive substance compartments in view of the placement of the load cell. Moreover, the dosage apparatuses of Kawanishi are used for industrial fillings and not for laboratory appliances, such that the accuracy requirements are some order of magnitudes smaller.

In contrast thereto, the device and the method for dosage of substances according to the present invention are based on a principally different dosing principle. In contrast to the dosing principle disclosed in Kawanishi, the present invention provides for an approach to the target weight in that at first a first amount of substance is dosed into the target container, the amount of dosed substance is then weighed by means of a balance, then additional substance is dosed into the target container, then it is weighed again, etc. until

the target weight is attained. Thus, several weighings take place for one dosage, and in particular also the dosed amount of substance is weighed by a balance, and not only the substance to be dosed. The dosing principle according to the invention allows for a much more accurate dosage, at which also a more accurate balance is needed, which enables the measuring of the amount of substance of each individual substance compartment by weighing of the difference before and after emptying of the substance compartment.

The different dosing principle is also reflected in the independent device and method claims 1 and 26 as presently configured.

The device for dosage of substances according to claim 1 of the present invention differs from the devices disclosed in Kawanishi by the fact that it comprises a weighing balance for the determination of the quantity of dosed substance and further comprises control means which control the emptying of the substance compartments in a manner dependent on the quantity of dosed substance, which is determined by means of the weighing balance.

As mentioned above, with the apparatuses of Kawanishi, it is not the weight of the quantity of dosed substance measured by means of the load cell, but a gross weight of substance to be dosed partially, which normally does not correspond to the target weight. From this gross weight the combination of the substance compartments to be emptied is then determined, but their quantity of substance is not weighed. Moreover, there are no control means which control the emptying of the substance compartments in a manner dependent on the quantity of dosed substance which is determined by means of the weighing balance. This is because the quantity of dosed substance is never determined by means of the weighing balance. According to Kawanishi, there is only a weighing of the gross weight, which neither corresponds to the target weight nor to the effectively dosed quantity of substance.

The method for dosage of substances according to claim 26 of the present invention differs from the methods disclosed in Kawanishi by the fact that it is carried out with a device according to claim 1. Additional differences are that the quantity of dosed substance is determined with a weighing balance, that by control means it is calculated whether, and if need be, how much substance is still to be dosed into the vessel, and that according to

the result, it is proceeded further with the emptying of a further substance compartment or the dosage is ended.

As mentioned above in connection with claim 1, with the apparatuses of Kawanishi it is not the weight of the quantity of dosed substance that is measured by means of the load cell, but a gross weight of substance to be dosed partially, which normally does not correspond to the target weight. From this gross weight the combination of the substance compartments to be emptied is then determined, but the quantity of the substance is not weighed. Moreover, it is not calculated how much substance is still to be dosed into the vessel. And in any case no further dosage by additional emptying of a further substance compartment takes place.

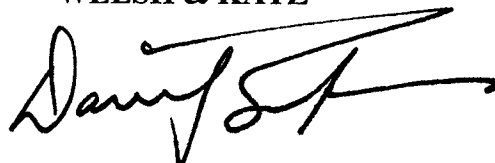
Thus, the subject-matters of claims 1 and 26, and the claims dependent thereon, are not anticipated by Kawanishi. Further, the subject matter of claim 1 and 26, and the claims dependent thereon, is also not obvious because they are based on a completely different dosage principle.

The Office Action has rejected claims 7 as being obvious in view of Kawanishi and claims 11-14 and 22 as being unpatentable over Kawanishi in view of Materna (US Published Patent Application No. US 2002/0084920). Applicant respectfully avers that as the teachings of Kawanishi do not anticipate the present invention, the addition of a further limitation in claim 7 cannot cause that claim to be obvious in light of Kawanishi. Further, the teachings of Materna add nothing to the teachings of Kawanishi so as to make dependent claims 11-14 and 22 obvious in view of the combination.

It is respectfully submitted that the claims are in condition for allowance. Continued examination and allowance of the claims is requested.

Respectfully submitted,

**HUSCH BLACKWELL SANDERS LL
WELSH & KATZ**

A handwritten signature in black ink, appearing to read 'Daniel M. Gurfinkel', with a long horizontal flourish extending to the right.

Daniel M. Gurfinkel, Reg. No. 34,177

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Customer No. 24628